

Unity™ Series 1002-8 RQ™

8-Channel Professional Stereo Console





Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock – DO NOT OPEN!

CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.



Este símbolo tiene el propósito de alertar al usuario de la presencia de "(voltaje) peligroso" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto.

PRECAUCION: Riesgo de corrientazo – No abra.

PRECAUCION: Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el usuario pueda reparar. Deje todo mantenimiento a los técnicos calificados.

ADVERTENCIA: Para evitar corrientazos o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea más advertencias en la guía de operación.



Ce symbole est utilisé pour indiquer à l'utilisateur la présence à l'intérieur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit.

ATTENTION: Risques de choc électrique – NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié.

AVERTISSEMENT: Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplémentaires situés dans le guide.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko – Elektrischer Schlag! Nicht öffnen!

VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

ACHTUNG: Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

ENGLISH

GENERAL DESCRIPTION:

The Unity™ 1002-8 RQ is an eight input compact mixer that can be used in sound reinforcement or recording applications. It has been engineered for maximum headroom and minimum noise, with a 10 dB headroom improvement over other designs. Quality low-noise precision parts are used throughout the mixer. Meters on the main outputs greatly help in checking the signal going to the power amplifiers or tape recording inputs.



1. GAIN:

Varies the input gain to allow for a wide dynamic range. It affects both the line and mic inputs. Proper adjustment of the input gain will maximize the signal-to-noise ratio. If the channel clip LED lights, the level is set too high and should be reduced until it never lights.

2. HIGH EQ:

A shelving type of active tone control that varies the treble frequency levels +/-15 dB at 12 kHz. It is designed to remove noise or to add brilliance to the signal, depending on the quality of the source.

3. MID EQ:

A bandpass (peak/notch) type of active tone control that varies the midrange frequency levels +/-15 dB at a frequency of 750 Hz.

4. LOW EQ:

A shelving type of active tone control that varies the bass frequency levels +/-15 dB at 80 Hz. It will add depth to thin signals, or clean up muddy ones.

5. MON:

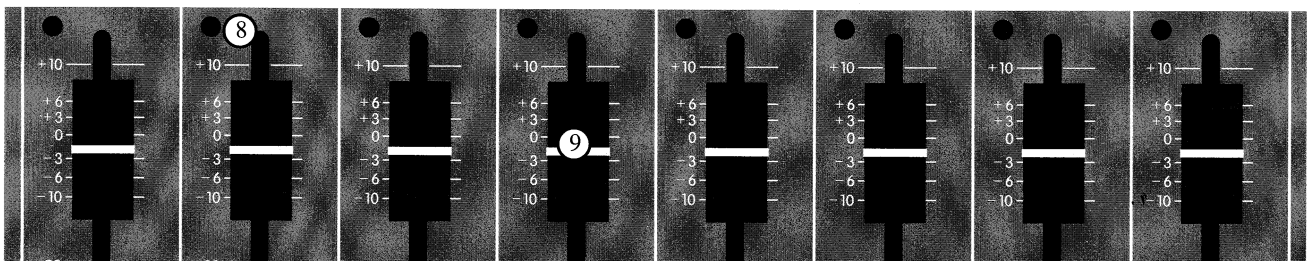
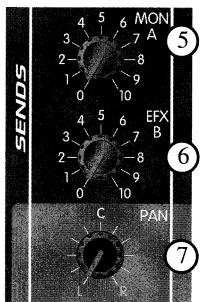
Adjusts the level of the channel signal that is added to the Monitor mix. The control is post-EQ and pre-fader, allowing channel fader adjustment without affecting the Monitor mix.

6. EFFECTS:

Adjusts the level of the channel signal that is added to the Effects mix. It is post-fader, designed for use as an effects send.

7. PAN:

Sets the channel's position in the L-R stereo field.

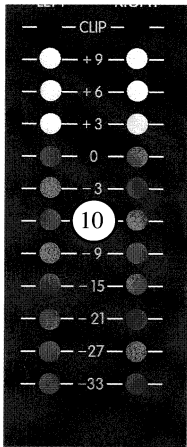


8. CLIP LED:

Normally indicates that the channel signal level is nearing the overload point. This circuit monitors the input gain and equalization for overload. It illuminates at +19 dBu and warns that gain or EQ boost should be reduced. There is roughly 2 dB of headroom remaining when it lights.

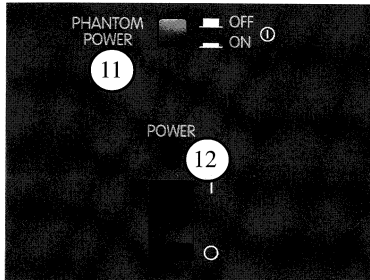
9. FADER:

Channel output level control. The level of the channel can be adjusted from off to +10 dB of gain. The optimum setting is the “0” (unity gain) position, but even at full gain there is 26 dBu of headroom (from nominal) available.



10. LED METERS:

Two 12-segment LED arrays monitor the levels of the main L/R outputs. The 0 dB reference level corresponds to +0 dBu at the 1/4" jacks.



11. PHANTOM POWER:

Applies 48 VDC voltage to the input XLR connectors to power microphones that require it. If phantom power is used, do not connect unbalanced dynamic microphones or other devices to the XLR inputs that cannot handle this voltage. (Some wireless receivers may be damaged; consult their manuals.) The channel line input jacks (#26) are not connected to the 48 V supply, and are safe for all inputs (balanced or unbalanced).

12. POWER:

The mixer's main power switch. The power-on LED indicator will light when the unit is powered.

13. EFFECTS MASTER:

Sets the output level of the effects mix sent to the output jack.

14. STEREO RETURN TO MONITOR:

Sets the level of the Stereo Return signal (effects) that is added to the Monitor mix. This is a mono mix of the left and right signals.

15. STEREO RETURN TO L/R:

Sets the level of the Return signal (effects) that is added to the L/R mix.

16. STEREO RETURN PAN:

Determines the balance of the Stereo Return signal that is added to the L/R mix. If the signal is mono, it sets the left-right position.

17. MONITOR FADER:

Sets the overall level of the monitor signal that is sent to the monitor output jack. The optimum setting for this control is the “0” (unity gain) position.

18. TAPE TO MONITOR LEVEL:

Adjusts the level of the tape signal supplied to the Monitor mix. This control is independent of the tape L/R level.

19. TAPE TO L/R LEVEL:

Adjusts the level of the tape signal supplied to the L/R mix.

20. MASTER LEFT/RIGHT FADERS:

Master L/R level controls. Since the tape and headphone/control room outputs come from this mix, they will also be affected by its adjustment. The output levels are monitored by the left and right meters. The optimum setting for these controls are the “0” (unity gain) position.

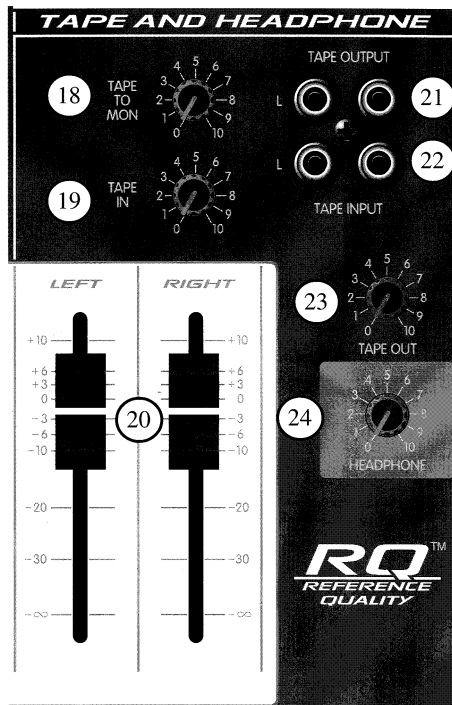
21. TAPE OUTPUT JACKS:

Provides a signal to feed a stereo tape deck or other input. This signal is the L/R signal with the level set by the Tape output control. The Tape input signal is also included, and can cause feedback if the tape input level is turned up when playing back and recording on a single machine.

22. TAPE INPUT JACKS:

Receives the input from a stereo tape deck or a CD player.





23. TAPE OUTPUT LEVEL:

Sets the level of the L/R signal sent to the Tape output jacks.

24. HEADPHONE/CONTROL ROOM LEVEL:

Adjusts the level of the headphone and outputs. The signal is independent of the L/R master faders (pre-fader).

25. MIC INPUT:

XLR balanced low impedance channel input optimized for a microphone or other low impedance source. Pin 2 is the positive input. Because of the wide range of gain adjustment, signal levels up to 22 dBu (8.9 VRMS) can be accommodated.

26. LINE INPUT:

1/4" balanced (TRS) high impedance input for high-level signals. The tip is the positive input, which should also be used for unbalanced inputs. This input is connected through a 10 dB pad to the MIC input. The two inputs cannot be used simultaneously.

27. RETURN INPUTS:

1/4" balanced (TRS) high impedance input for high level signals. These are designed for effect returns, but can be used for additional stereo inputs. The tip is the positive input, which should also be used for unbalanced inputs. The Left/Mono input supplies signal to both the left and right inputs if there is no input connected to the right input jack.

28. AUX EFFECT OUT:

1/4" TRS Output jack of the Aux Effect mix. It can be used to feed an external monitor system or effects unit. The level is set by the individual channel Aux Effects send and the Effects Master control.

29. LEFT and RIGHT OUTPUTS:

The outputs of the Left-Right mix that are adjusted by the Left and the Right faders. These are the main outputs of the mixer.

30. MONITOR OUT:

Output of the corresponding monitor mix designed to feed an external monitor system. The output levels are set by the individual channel monitor send controls and by the master monitor fader.

31. HEADPHONE OUTPUT:

This stereo jack (TRS) provides the signal to drive stereo headphones. The level is set by the headphone/control room level control. Tip = Left; Ring = Right; Shield = Ground.



Unity 1002-8 RQ Console

Specifications:

Input Specifications:

Function	Input Z (ohms) Min	Input Gain Settings	Input Levels			Bal/ Unbal	Connector
			Min**	Nominal*	Max		
Microphone (150 ohms)	2.2K	Max Gain (56 dBu)	-76 dBu	-56 dBu	-34 dBu	Bal	XLR Pin 1 Gnd Pin 2 (+), Pin 3 (-)
		Min Gain (0 dB)	-20 dBu	-10 dBu	+22 dBu		
Line (10 K ohms)	10 K	Max Gain (44 dB)	-64 dBu	-44 dBu	-22 dBu	Bal	1/4" TRS; Tip (+), Ring (-), Sleeve Ground
		Min Gain	-8 dBu	12 dBu	+32 dBu		
Aux Return	22 K	N/A	-33 dBu	-13 dBu	+10 dBu	Unbal	1/4" Phone
Tape	22 K	N/A	-23 dBu	-18 dBu	+10 dBu	Unbal	RCA Phono

0 dBu = 0.775 V (RMS)

**Min. input level (Sensitivity) is the smallest signal that will produce nominal output (0 dBu) with channel and master faders set for maximum gain.

* Nominal settings are defined as all controls set at 0 dB (or 50% rotation for rotary pots) except the gain adjustment pot, which is as specified.

Unity 1002-8 RQ Console

Output Specifications:

Function	Minimum Load Z (ohms)	Output Level		Bal/Unbal	Connector
		Nominal	Max		
Main L/R	600	0 dBu	+22 dBu	Unbal	1/4" Phone
Monitor	600	0 dBu	+22 dBu	Unbal	1/4" Phone
Aux Send	600	0 dBu	+22 dBu	Unbal	1/4" TRS
Headphone	8	0 dBu (no load)	+22 dBu	Unbal	1/4" TRS: Tip Left, Ring Right, Sleeve Ground
Tape	1 K	0 dBu	+22 dBu	Unbal	RCA Phono

0 dBu = 0.775V (RMS)

Gain:

Mic Input Gain Adj. Range:	0 dB to 56 dB
Mic Input to L/R Output:	76 dB (Max Gain)
Line Input Gain Adj. Range:	-10 dB to 46 dB
Line Input to L/R Output:	66 dB (Max Gain)
Aux Return to L/R Bal. Output:	33 dB (Max Gain)

Frequency Response:

Mic Input to L-R Output: 20 Hz to 20 kHz +0 dB/-1 dB

Total Harmonic Distortion (THD):

<0.02% 20 Hz to 20 kHz Mic to L-R output: (10 Hz-80 kHz BW)

Hum and Noise:

Output	Residual Noise	S/N Ratio Ref: 0 dBu	Test Conditions
Master L/R	-94 dBu	94 dB	All Faders Down
" "	-82 dBu	82 dB	Master Fader Nominal, Channel Faders Down, All Channels Muted
" "	-81 dBu	81 dB	All Controls Nominal, Mic Gain Min.

(Hum and Noise Measurements: 22 Hz to 22 kHz BW)

Equivalent Input Noise (EIN):

-129 dBu (Input terminated with 150 ohms)

Crosstalk:

- >60 dB Adjacent Input Channels (20 Hz - 20 kHz)
- >60 dB Left to Right Outputs (20 Hz - 20 kHz)

Meters:

12-segment, peak reading
(0 dB= dBu)

Signal/Overload Indicators:

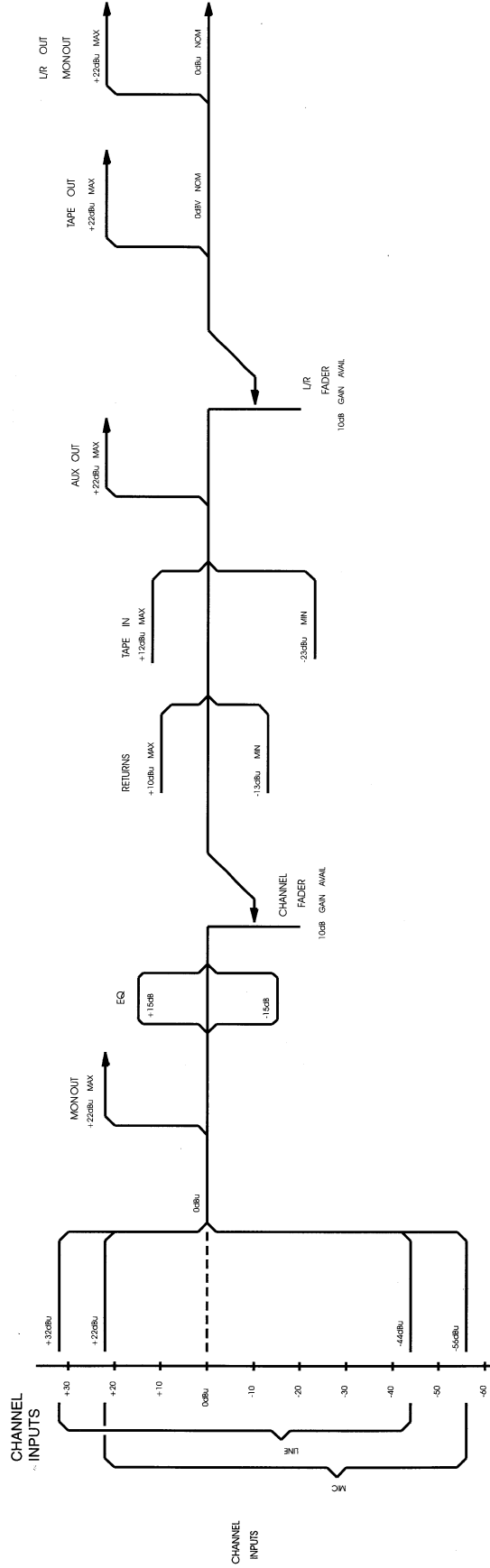
Red LED lights 2 dB below clipping

Power Requirements:

DOM: 120 VAC 60 Hz
EXP: 230 VAC 50/60 Hz

LEVELS

LEVELS



THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY.

Ces clauses de garantie ne sont valables qu'aux Etats-Unis et au Canada. Dans tous les autres pays, les clauses de garantie et de maintenance sont fixées par le distributeur national et assurées par lui selon la législation en vigueur. •• Diese Garantie ist nur in den USA und Kanada gültig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jeweiligen Landes unterworfen. •• Esta garantía es válida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, están sujetos a las garantías y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes países.

**PEAVEY ONE-YEAR LIMITED
WARRANTY/REMEDY**

PEAVEY ELECTRONICS CORPORATION ("PEAVEY") warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase, PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions, and limitations hereinafter set forth:

PEAVEY 90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase; PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions, and limitations hereinafter set forth.

CONDITIONS, EXCLUSIONS, AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect, if:

- a. The first purchase of the product is for the purpose of resale; or
- b. The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
- c. The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- d. The serial number affixed to the product is altered, defaced, or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

- a. In the case of tubes or meters, replace the defective component without charge.
- b. In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option; and provided, however, that, in any case, all costs of shipping, if necessary, are paid by you, the purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED AND MAILED TO AND RECEIVED BY PEAVEY WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

- a. Bring the defective item to any PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER and present therewith the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED PEAVEY DEALER in connection with your purchase from him of this product. If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service you will be directed to the nearest other PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER which can provide such service.

OR

- b. Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION
International Service Center
326 Hwy. 11 & 80 East
Meridian, MS 39301

including therewith a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items: If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, ANY INCIDENTAL DAMAGES, OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE; PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESSED, LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESSED WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY, OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of expressed or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

INSTRUCTIONS — WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION
P.O. BOX 2898
Meridian, MS 39302-2898

- a. Keep the PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document. There will be no identification card issued by Peavey Electronics Corporation.
2. IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESSES:
 - a. Completion and mailing of WARRANTY REGISTRATION CARDS — Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help ensure that you are contacted and properly notified.
 - b. Notice of address changes — If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
3. You may contact Peavey directly by telephoning (601) 483-5365.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric products, basic cautions should always be followed, including the following.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
 - a. The power supply cord or plug has been damaged.
 - b. Anything has fallen or been spilled into the unit.
 - c. The unit does not operate correctly.
 - d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss.

Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!



Features and specifications subject to change without notice.

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